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EXAMINER
HARPER, VINCENT PAUL

ART UNIT	PAPER NUMBER
2626	

NOTIFICATION DATE	DELIVERY MODE
09/17/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23,26 and 28-43* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23,26,28-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 1, 34 and 39 are objected to because of the following informalities:

Claim 1, in line 5, the phrase "a mobile device" should be replaced with "the mobile device".

Claim 34, in line 4, the phrase "a mobile device" should be replaced with "the mobile device".

Claim 39, in line 5, the phrase "a mobile device" should be replace with "the mobile device".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 23, 26, 28 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (US Patent 5,524,169), hereinafter referred to as Cohen, in view of Clise et al. (US Patent 5,797,091), hereinafter referred to as Clise, and Monaco et al. (US Patent 6,314,402), hereinafter referred to as Monaco.

Regarding **claim 23**, Cohen teaches a method for location-specific mobile speech recognition (abstract). Cohen's teachings include the following:

• capturing an utterance of a speaker (Fig. 3, item 62, utterance detected);

• determining a coordinate location of a mobile device communicating over the communication network ... (Fig. 3, item 64; col. 4, lines 5-26; determine the geographic location);

• using the determined coordinate location to obtain a subset of records from a plurality of records; ... [a grammar] responsive to the determined coordinate location of the mobile device using the subset of records (Fig. 2, item 40, multiple location specific libraries where one is selected based on location; col. 4, lines 26-44; location-specific library is within [around] a location [col. 4, lines 39-43]; Fig. 3, item 66);

• capturing a vocal expression of the speaker utilizing the mobile device (col. 4, lines 45-56; utterance is captured and recognized); and

• determining information related to the vocal expression based on comparing the grammar with the captured vocal expression (col. 4,lines 45-56; col. 5, lines 1-6).

Cohen teaches the determination of user location using a variety of techniques including the user entry of the location using a keyboard (col. 4, lines 20-26), but Cohen does not specifically teach "capturing an utterance of a speaker; and **determining coordinate location of a mobile device** communicating over the communication network **using the captured utterance**". However, the examiner contends that this concept was well known in the art, as taught by Clise.

In the same field of endeavor, Clise teaches the use of a personal communication system that uses audio input as an alternative form of generating position data (abstract). In particular, Clise teaches that ability to enter position data by voice (col. 7, lines 8-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the voice entry of location data, as taught by Clise, because it is well known in the art at the time of invention that the voice entry of location data is convenient under some circumstances (Clise, col. 7, lines 20-30) and it provides an alternative means of entering a location.

Cohen teaches the use of location specific grammars (col. 4, lines 24-56), but Cohen does not specifically teach "**building a dynamic grammar** responsive to the determined coordinate location of the mobile device...**while the mobile device is communicating on the communication network.**" However, the examiner contends that this concept was well known in the art, as taught by Monaco.

In the same field of endeavor, Monaco teaches a method for creating modifiable and combinable speech objects in an interactive voice response system. Monaco's teachings include the creation of dynamic grammars in situations where the items to be recognized are not fixed (col. 9, lines 50-65; grammars can be used in any situation where the items to be recognized are not fixed and are created programmatically at runtime; "construct grammars on-the-fly"; on a telephony interface; col. 10, lines 51-67, dynamic).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the support for dynamic grammars, as taught by Monaco, for the purpose of utilizing the location specific information provided by Cohen to build dynamic grammars because it is well known in the art at the time of invention that in any situation where the items to be recognized are not fixed (and possibly not initialized) this support can be generated dynamically (Monaco, col. 9, lines 57-60; col. 10, lines 60-64).

Regarding **claim 26**, Cohen in view of Clise and Monaco teaches everything claimed, as applied above (see claim 23). In addition, Cohen teaches the operation of the device over a cellular telephone network where the network can be used to determine location (col. 4, lines 14-17), and Monaco teaches "wherein determining a coordinate location of a mobile device communicating over the communication network is performed by a first server and building a dynamic grammar in response to the determined location of the mobile device is performed by a second server different from the first server" (Fig. 1A, and 1B; col. 6, lines 5-25; the system can be implemented in a variety of ways).

Regarding **claim 28**, Cohen in view of Clise and Monaco teaches everything claimed, as applied above (see claim 23). In addition, Cohen teaches "providing information over the communication network to the mobile device related to a location

identified based on the location of the mobile device" (col. 4, lines 4-26, cellular

transmission system may be used to determine geographic location).

Regarding **claim 33**, Cohen in view of Clise and Monaco teaches everything

claimed, as applied above (see claim 23). In addition, Cohen teaches "wherein building

the dynamic grammar responsive to the determined coordinate location of the mobile

device is also responsive to information provided by the speaker " (col. 4. lines 22-45;

keyboard entry of location results in the retrieval of location-specific library).

3.   Claims 34-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen

in view of Monaco.

Regarding **claim 34**, Cohen teaches a method for location-specific mobile

speech recognition (abstract). Cohen's teachings include the following:

• determining a location of a mobile device communicating over the communication

network (col. 4, lines 5-26; determine the geographic location);

• identifying a subset of records by determining which subset of records correspond to

a pre-defined area around the location (Fig. 3, items 64 and 66, determine the current

location and select particular location library);

• ... [a grammar] of information spatially related to the mobile device location based

the identified subset of records ... (Fig. 2, item 40, multiple location specific libraries;

col. 4, lines 26-44; location-specific library is within [around] a location [col. 4, lines 39-43]);

- capturing a vocal expression of a speaker utilizing the mobile device (col. 4, lines 45-56; utterance is captured and recognized); and

- determining information related to the vocal expression based on comparing the grammar with the captured vocal expression (col. 4,lines 45-56; col. 5, lines 1-6).

Cohen teaches the use of location specific grammars representing street names and businesses within a geographic location (col. 4, lines 24-56), but Cohen does not specifically teach "**building a dynamic grammar ...while the mobile device is communicating on the communication network**". However, the examiner contends that this concept was well known in the art, as taught by Monaco.

In the same field of endeavor, Monaco teaches a method for creating modifiable and combinable speech objects in an interactive voice response system. Monaco's teachings include the creation of dynamic grammars in situations where the items to be recognized are not fixed (col. 9, lines 50-65; grammars can be used in any situation where the items to be recognized are not fixed and are created programmatically at runtime, col. 10, lines 51-67; "construct grammars on-the-fly"; on a telephony interface; dynamic).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the support for dynamic grammars, as taught by Monaco, for the purpose of utilizing the location specific information provided by Cohen to build dynamic grammars because it is well

known in the art at the time of invention that in any situation where the items to be

recognized are not fixed (and possibly not initialized) this support can be generated

dynamically (Monaco, col. 9, lines 57-60; col. 10, lines 60-64).

Regarding **claim 35**, Cohen in view of Monaco teaches everything claimed, as

applied above (see claim 34). In addition, Cohen teaches "wherein determining a

coordinate location of a mobile device communicating over the communication network

comprises receiving the location of the mobile device from the communication network"

(col. 4, lines 4-26; signals from the cellular transmission network).

Regarding **claim 36**, Cohen in view of Monaco teaches everything claimed, as

applied above (see claim 34). In addition, Cohen teaches "wherein determining a

coordinate location of a mobile device communicating over the communication network

comprises receiving location information from the mobile device" (col. 4, lines 4-26,

GPS within the device or keyboard entry).

Regarding **claim 37**, Cohen in view of Monaco teaches everything claimed, as

applied above (see claim 34). In addition, Cohen teaches the operation of the device

over a cellular telephone network where the network can be used to determine location

(col. 4, lines 14-17), and Monaco teaches "wherein determining a coordinate location of

a mobile device communicating over the communication network is performed by a first

server and building a dynamic grammar in response to the determined location of the

mobile device is performed by a second server different from the first server" (Fig. 1A, and 1B; col. 6, lines 5-25; the system can be implemented in a variety of ways).

Regarding **claim 38**, Cohen in view of Monaco teaches everything claimed, as applied above (see claim 36). In addition, Cohen teaches "wherein receiving location information from the mobile device comprises receiving location information from the user of the mobile device" (col. 4, lines 4-26; keyboard entry is performed by the user).

4.   Claims 29-32 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view Clise and Monaco and further in view of Julia et al. (US Patent 7,036,128), hereinafter referred to as Julia.

Regarding **claim 29**, Cohen in view of Clise and Monaco teaches everything claimed, as applied above (see claim 28). But Cohen does not specifically teach "wherein the information provided over the communication network to the mobile device comprises direction information." However, the examiner contends that this concept was well known in the art, as taught by Julia.

In the same field of endeavor, Julia discloses a mobile computing environment were information can be accessed from a variety of sources (abstract). Julia's teachings include access of direction information (Fig. 13, col. 32, lines 30-35, guides the car alone the chosen route; col. 32, lines 10-15, using speech).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the features, as taught by Julia, because it is well known in the art at the time of invention for the purpose of more convenient access to information using speech recognition (Julia, col. 2, lines 28-33).

Regarding **claim 30**, Cohen in view of Clise and Monaco teaches everything claimed, as applied above (see claim 28). But Cohen does not specifically teach "wherein the information provided over the communication network to the mobile device comprises map information." However, the examiner contends that this concept was well known in the art, as taught by Julia.

In the same field of endeavor, Julia discloses a mobile computing environment were information can be accessed from a variety of sources (abstract). Julia's teachings include access of direction information including the display of a map (Fig. 13, col. 32, lines 30-35, guides the car alone the chosen route; col. 32, lines 10-15, using speech).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the features, as taught by Julia, because it is well known in the art at the time of invention for the purpose of more convenient access to information using speech recognition (Julia, col. 2, lines 28-33).

Regarding **claim 31**, Cohen in view of Clise and Monaco teaches everything

claimed, as applied above (see claim 28). But Cohen does not specifically teach

"wherein the information provided over the communication network to the mobile device

comprises address information." However, the examiner contends that this concept was

well known in the art, as taught by Julia.

In the same field of endeavor, Julia discloses a mobile computing environment

were information can be accessed from a variety of sources (abstract). Julia's

teachings include access of direction information including address information (Fig. 13,

col. 32, lines 10-67, location of nearest gas stations; col. 32, lines 10-15, using speech).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Cohen by specifically providing the features,

as taught by Julia, because it is well known in the art at the time of invention for the

purpose of more convenient access to information using speech recognition (Julia, col.

2, lines 28-33).

Regarding **claim 32**, Cohen in view of Clise and Monaco teaches everything

claimed, as applied above (see claim 28). But Cohen does not specifically teach

"establishing a network connection from the mobile device to the location identified

based on the location of the mobile device." However, the examiner contends that this

concept was well known in the art, as taught by Julia.

In the same field of endeavor, Julia discloses a mobile computing environment

were information can be accessed from a variety of sources (abstract). Julia's

teachings include the support from a communication center and access to technical

information (Fig. 6, web agent; col. 9, lines 50-57, interaction with agents; col. 10, lines

5-17, access to services available over the Web; col. 32, lines 26-49, col. 32, line 65

through col. 33, line 10, e.g., documentation is available).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Cohen by specifically providing the features,

as taught by Julia, because it is well known in the art at the time of invention for the

purpose of more convenient access to information using speech recognition (Julia, col.

2, lines 28-33).

Regarding **claim 39**, Cohen teaches a method for location-specific mobile

speech recognition (abstract). Cohen's teachings include the following:

- capturing an utterance of a speaker (Fig. 3, item 62, utterance detected);

- determining a location of a mobile device communicating over the communication

network (col. 4, lines 5-26; determine the geographic location);

- using the determined location to select a subset of records from a plurality of

records; ... [a grammar] in response to the determined location of the mobile device

using the subset of records (Fig. 2, item 40, multiple location specific libraries; col. 4,

lines 26-44);

- determining information related to the vocal expression based on comparing the

grammar with the captured vocal expression (col. 4,lines 45-56; col. 5, lines 1-6).

Cohen teaches the determination of user location using a variety of techniques including the user entry of the location using a keyboard (col. 4, lines 20-26), but Cohen does not specifically teach "capturing an utterance of a speaker; and **determining a location of a mobile device** communicating over the communication network **using the captured utterance**". However, the examiner contends that this concept was well known in the art, as taught by Clise.

In the same field of endeavor, Clise teaches the use of a personal communication system that uses audio input as an alternative form of generating position data (abstract). In particular, Clise teaches that ability to enter position data by voice (col. 7, lines 8-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the voice entry of location data, as taught by Clise, because it is well known in the art at the time of invention that the voice entry of location data is convenient under some circumstances (Clise, col. 7, lines 20-30) and it provides an alternative means of entering a location.

Cohen teaches the use of location specific grammars (col. 4, lines 24-56), but Cohen does not specifically teach "**building a dynamic grammar** in response to the determined location of the mobile device ...**while the mobile device is communicating on the communication network**." However, the examiner contends that this concept was well known in the art, as taught by Monaco.

In the same field of endeavor, Monaco teaches a method for creating modifiable and combinable speech objects in an interactive voice response system. Monaco's teachings include the creation of dynamic grammars in situations where the items to be recognized are not fixed (col. 9, lines 50-65; grammars can be used in any situation where the items to be recognized are not fixed and are created programmatically at runtime, "construct grammars on-the-fly"; on a telephony interface; col. 10, lines 51-67, dynamic).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cohen by specifically providing the support for dynamic grammars, as taught by Monaco, for the purpose of utilizing the location specific information provided by Cohen to build dynamic grammars because it is well known in the art at the time of invention that in any situation where the items to be recognized are not fixed (and possibly not initialized) this support can be generated dynamically (Monaco, col. 9, lines 57-60; col. 10, lines 60-64).

Furthermore, Cohen does not specifically teach the following: "using the determined location of the mobile device to generate a user prompt; transmitting the user prompt to the mobile device; capturing a vocal expression of the speaker utilizing the mobile device in response to the user prompt." However, the examiner contends that these concepts well known in the art, as taught by Julia.

In the same field of endeavor, Julia discloses a mobile computing environment were information can be accessed from a variety of sources (abstract). Julia's teachings include interacting with the navigation system which includes location specific

prompts transmitted to the mobile device supported by speech recognition (col. 26, lines

30-57, system <u>interacts</u> (i.e., prompts with responses) with the user using location

specific information (e.g., Show me information near here); col. 31, lines 10-67; using

speech, request for directions; col. 34, lines 11-25, uses speech recognition),

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Cohen by specifically providing the features,

as taught by Julia, because it is well known in the art at the time of invention for the

purpose of more convenient access to information while traveling using speech

recognition (Julia, col. 2, lines 28-33).

Regarding **claim 40**, Cohen in view of Clise, Monaco and Julia teaches

everything claimed, as applied above (see claim 39). In addition, Julia teaches "wherein

the prompt is a request for secondary information" (col. 31, lines 10-67, where queries

are performed to access additional information).

Regarding **claim 41**, Cohen in view of Clise, Monaco and Julia teaches

everything claimed, as applied above (see claim 39). In addition, Cohen teaches

"wherein determining a location of a mobile device communicating over the

communication network comprises receiving the location of the mobile device from the

communication network. (col. 4, lines 4-26; signals from the cellular transmission

network).

Regarding **claim 42**, Cohen in view of Clise, Monaco and Julia teaches

everything claimed, as applied above (see claim 39). In addition, Cohen teaches

"wherein determining a location of a mobile device communicating over the

communication network comprises receiving location information from the mobile

device" (col. 4, lines 4-26, GPS within the device or keyboard entry).

Regarding **claim 43**, Cohen in view of Clise, Monaco and Julia teaches

everything claimed, as applied above (see claim 40). In addition, Julia teaches "wherein

the secondary information is secondary address information" (col. 31, lines 35-46, gas

stations in vicinity; lines 47-67, campus location data; open agent architecture can

access additional information).

Response to Arguments

5.   Applicant's arguments with respect to claims 23, 26, 28-33, 39-43 have been

considered but are moot in view of the new ground(s) of rejection.

See the rejections of the corresponding claims. In addition, it is noted that

(responding to Applicant's argument in paragraph 3, p. 8) Monaco teaches the use of

dynamic libraries that can be created on-the-fly while communicating on a network (Fig.

3, col. 9, lines 45-66).

6.   Applicant's arguments filed 7/31/2007 with respect to claim 34-38 have been fully

considered but they are not persuasive.

See the rejections of the corresponding claims and the previous argument

regarding Monaco. In addition, regarding the assertion (p. 11, ¶3) that "Cohen does not

select a grammar that corresponds to locations that are less than an 'application

specific distance' from the location". The examiner notes that the claim language refers

to a "pre-defined area around the location" and that Cohen teaches the use of location-

specific libraries that include speech templates representative of street names within a

geographic location, which the examiner maintains corresponds to a pre-defined area

around that location.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to V. Paul Harper whose telephone number is (571) 272-

7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number

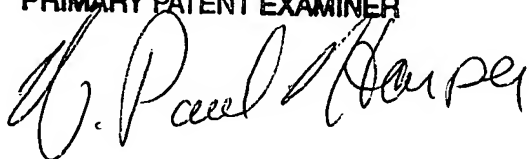for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/7/2007

VPH

V. PAUL HARPER
PRIMARY PATENT EXAMINER